

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001631**Date Inspected:** 25-Feb-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

<b>CWI Name:</b>	Sha Zin	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	Tower 89m Mockup	

**Summary of Items Observed:****89m Mockup**

This Quality Assurance (QA) inspector arrived at ZPMC for observation at the tower shop for the 89m mock-up and witnessed ZPMC personnel preparing to weld joint number MUB-MA21-54 with electric thermal heating couplers to weld a lug plate at this location as described in Request For Information (RFI) number ABF-ZPM-36-R00 which allowed the contractor to use the lug plate in lieu of the welding the stiffener plate directly to the diaphragm due to inaccessible access for welding of both sides. After reviewing the plate "placed" (not tacked in) at the location it was observed that the required weld to be placed in the location would not have the full effective throat for approximately 30-40% of the weld (see photo 3 below). ZPMC Quality Control personnel Sha Zhi conferred with the QA Inspector and ZPMC elected not to weld due to the lack of weld coverage as stated above. No welding accord for the remainder of this QA Inspectors shift for the 89m mockup. ZPMC was observed performing the drilling of the doubler plate on skin plate A for the shear connection beams for the remainder of the shift. Shear connection beams were transferred to the tower shop next to the 89m mock for the purpose of final grinding for the visual acceptance by ZPMC and Ultrasonic Testing (UT) ZPMC was observed performing UT for 2 shear beams(see photo 1 below) numbered MUSB MA26 and MUSB MA26.1. UT Technicians Li Li Ming and Eshui Qin were observed testing the flange to web connection of the built-up shear connection beams that had a total weld length tested for each component of 2860 mm. Piece number MUSB MA 26.1 was acceptable by ZPMC with no rejectable indications noted and Piece number MUSB MA 26 had 2 rejectable indications discovered by Eshui Qin (see photo 2 below) during the UT examination with total length of 80mm for the indications. The Above work appeared to be within the general requirements of the contract documents.

**114m mockup**

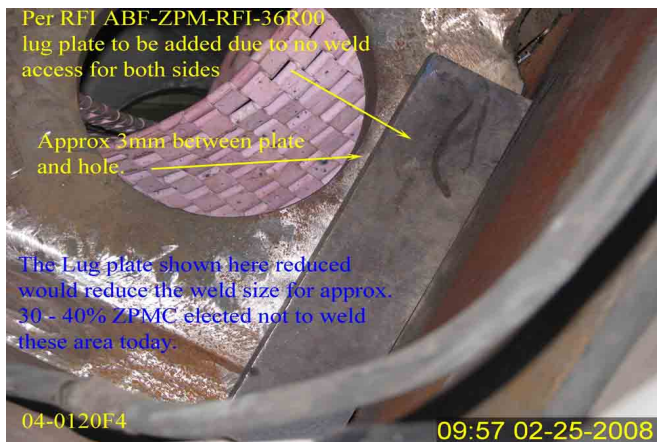
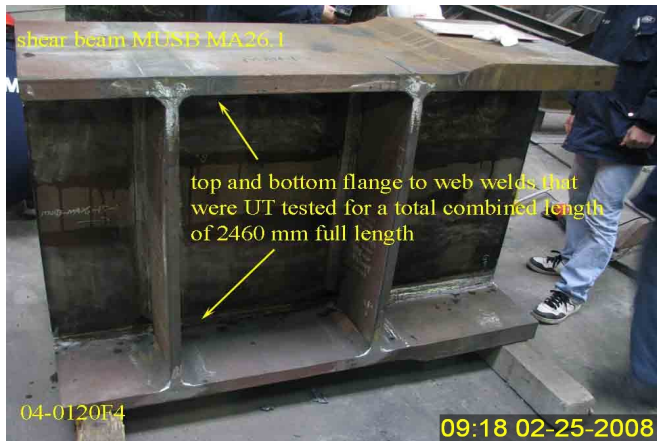
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# WELDING INSPECTION REPORT

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No work was observed on this QA Inspectors shift during his periodic observations.



## Summary of Conversations:

as noted in the contents of the report.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Riley,Ken

Quality Assurance Inspector

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**Reviewed By:** Cochran,Jim

QA Reviewer

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